

**AMENDMENTS TO THE CLAIMS**

1. (currently amended) A line transition including comprising:  
a dielectric substrate;  
a solid waveguide, the waveguide propagating electromagnetic waves within a three-dimensional space; and  
a conductive pattern formed on the dielectric substrate, the conductive pattern including a coupled-line pattern segment electromagnetically coupled with the electromagnetic waves propagating through the waveguide and a transmission-line pattern segment extending from the coupled-line pattern segment a planar circuit to realize planar circuit to waveguide transition, the solid waveguide propagating electromagnetic waves within a three-dimensional space, the planar circuit being constructed by forming a predetermined conductive pattern on a dielectric substrate,  
wherein

the dielectric substrate is disposed parallel to the an E plane of the solid waveguide in almost the middle of the solid waveguide, and

the conductive pattern on the dielectric substrate includes a coupled-line pattern segment electromagnetically coupled with a signal propagating through the solid waveguide and a transmission-line pattern segment extending from the coupled-line pattern segment, and

an the edge of the dielectric substrate has a notch in the vicinity of the coupled-line pattern segment, the notch having a side that is parallel to a the signal propagation direction of the coupled-line pattern segment, the length of the side being equal to or longer than the dimension in the a width direction of the E plane of the solid waveguide.

2. (original) A high frequency module including the line transition according to Claim 1.

3. (currently amended) A method for manufacturing a line transition including a solid waveguide and a planar circuit to realize planar-circuit to waveguide transition, the solid waveguide propagating electromagnetic waves within a three-dimensional space, the planar circuit being constructed by forming a predetermined conductive pattern on a dielectric substrate, the dielectric substrate being disposed parallel to an the E plane of the solid waveguide in substantially ~~a~~ almost ~~the~~ middle of the solid waveguide, the conductive pattern on the dielectric substrate including a coupled-line pattern segment electromagnetically coupled with the electromagnetic waves ~~a signal~~ propagating through the solid waveguide and a transmission-line pattern segment extending from the coupled-line pattern segment, an the edge of the dielectric substrate having a notch in a the vicinity of the coupled-line pattern segment, the notch having a side that is parallel to a the signal propagation direction of the coupled-line pattern segment, a the length of the side being equal to or longer than a the ~~dimension in the width direction~~ of the E plane of the solid waveguide, the method comprising ~~the steps of~~:

forming a plurality of the conductive patterns in a ceramic green sheet;  
forming ~~and~~ through holes in [[a]] the ceramic green sheet ~~serving as a~~ ~~motherboard~~ such that each through hole is arranged in a the vicinity of a the corresponding ~~line-coupled~~ coupled-line pattern segment of the conductive pattern at a predetermined spacing;  
firing the ceramic green sheet to form a motherboard; and

cutting the ~~fired~~ motherboard along lines passing through the through holes such that each through hole in the ~~fired~~ motherboard serves as the notch.

4. (new) The line transition according to claim 1, wherein the waveguide is a solid waveguide.

5. (new) The line transition according to claim 1, wherein the conductive pattern is a planar circuit which accomplishes planar-circuit to waveguide transition.

6. (new) The line transition according to claim 1, wherein the dielectric substrate is disposed in substantially a middle of the waveguide.